

C O

3



. SEQUENCE LISTING

<110> Audonnet, Jean-Christophe

<213> Artificial sequence

```
<120> Improved DNA Vaccines for Farm Animals, In particular bovines and
procines
<130> 454313-3154.2
<140> 09/766,442
      2001-01-16
<141>
<160> 106
<170> PatentIn version 3.0
<210>
      1
<211>
      40
<212> DNA
<213> Artificial sequence
<220>
<223>
      oligonucleotide used to prepare modified plasmid pVR1020
<400> 1
                                                                      40
gatctgcagc acgtgtctag aggatatcga attcgcggcc
<210>
       2
<211>
      40
<212> DNA
<213> Artificial sequence
<220>
      oligonucleotide used to prepare modified plasmid pVR1020
<223>
<400> 2
gateegegge egegaatteg atateeteta gacaegtget
                                                                      40
<210>
       3
<211>
      20
<212>
      DNA
<213> Artificial sequence
      oligonucleotide used to prepare plasmid pNS050
<223>
<400> 3
                                                                      20
ttggggaccc ttgattgttc
<210>
       4
      21
<211>
<212> DNA
```





	<220>		
	<223>	oligonucleotide used to prepare plasmid pNS050	
	<400>	4	
		gaaa aagaagaagg c	21
	ccgcag	gala aagaagaagg c	
	<210>	5	
	<211>	30	
		DNA	
	<213>	Artificial sequence	
	<220>	-li	
	<223>	oligonucleotide used to amplify sequence of intron II of rabbi lobin gene	.د ي
	<400>	5	
		gtcg acttggggac ccttgattgt	30
	cccac	3003 20003333320 0000320030	
	<210>	6	
	<211>	30	
	<212>		
	<213>	Artificial sequence	
Æ.	(213)	Attitutal beganne	
44	<220>		
	<223>	oligonucleotide used to amplify sequence of intron II of rabbi lobin gene	.t g
÷	<400>	6	
Ń	ctccat	gtcg acctgtagga aaaagaagaa	30
æ			
	<210>	7	
<u></u>	<211>	30	
		DNA	
<u>m</u>	<213>	Artificial sequence	
니 는			
-	<220>	l'annual de amilian alamid appose blumb pop	
	<223>	oligonucleotide used to amplify plasmid pPB278 through PCR	
	<400>	7	
	ttgtcg	acat ggccgctcgc ggcggtgctg	30
	010		
	<210>	8	
	<211>	21	
		DNA	
	<213>	Artificial sequence	
	<220>	•	
	<223>	oligonucleotide used to amplify plasmid pPB278 through PCR	
	<400>	8	
	gcaggg	cago ggotagogog g	21

```
<210> 9 *
<211> 51
<212> DNA
<213> Artificial sequence
<220>
      oligonucleotide used to prepare fragment for generating plasmid p
<223>
       PB28
<400> 9
                                                                      51
ctgcacgagc tccggttcta cgacattgac cgctggtcaa gacggactga g
<210> 10
<211>
      56
<212> DNA
<213> Artificial sequence
<220>
      oligonucleotide used to prepare fragment for generating plasmid p
<223>
       PB28
<400> 10
gateeteagt cegtettgac caegeggtea atgtegtaga aceggagete gtgcag
                                                                      56
<210> 11
<211>
      39
<212> DNA
<213> Artificial sequence
<220>
<223> primer used in amplification of modified form of BHV-1 gB gene
<400> 11
                                                                      39
aaaatttcga tatccgccgc ggggcgaccg gcgacaacg
<210> 12
<211> 33
<212> DNA
<213> Artificial sequence
<220>
<223>
       primer used in amplification of modified form of BHV-1 gB gene
<400> 12
                                                                      33
ggaagatett cagteegtet tgaccaegeg gte
<210> 13
<211>
      37
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide used in ligation of 1492bp fragment from plasmid
```

A A O

pPB28

DOYDSHHE.DBOOK

<400> tcgtgco	13 etge ggegeaagge cegggegege etgtagt	37
<210> <211> <212> <213>	14 37 DNA Artificial sequence	
<220> <223>	oligonucleotide used in ligation of 1492bp fragment from plasmipPB28	.d
<400> ctagact	14 taca ggegegeeeg ggeettgege egeagge	37
<210><211><212><212><213>	15 43 DNA Artificial sequence	
<220> <223>	oligonucleotide used to prepare truncated form of BHV-1 gC gene	:
<400> gcaccgo	15 ctgc ccgagttctc cgcgaccgcc acgtacgact agt	43
<210> <211> <212> <213> <223>	16 43 DNA Artificial sequence	
<223>	oligonucleotide used to prepare truncated form of BHV-1 gC gene	:
<400> ctagact	16 tagt cgtacgtggc ggtcgcggag aactcgggca gcg	43
<210><211><211><212><213>	17 39 DNA Artificial sequence	
<220> <223>	primer used in amplification of modified form of BHV-1 gC gene	
<400> aaaattt	17 tega tateceggeg ggggetegee gaggaggeg	39
<210> <211>	18 32	



	DNA.	
<213>	Artificial sequence	
<220>		
<223>	primer used in amplification of modified form of BHV-1 gC gene	
<400>	18	2.0
ggaaga	tete tagtegtaeg tggeggtege gg	32
<210>	19	
<211>	33	
<212>		
<213>	Artificial sequence	
<220>		
	primer used to amplify truncated gD gene of BHV-1	
10007	primor about to amplify orange out 52 years and and	
<400>	19	
tttctg	caga tgcaagggcc gacattggcc gtg	33
<210>	20	
	31	
<212>		
<213>	Artificial sequence	
<220>	the second secon	
<223>	primer used to amplify truncated gD gene of BHV-1	
<400>	20	
	gatt agggcgtagc gggggcgggc g	31
<210> <211>	21	
<212>		
	Artificial sequence	
	-	
<220>		
<223>	primer used to amplify modified form of BHV-1 gD gene	
<400>	21	
	tega tatececege geegegggtg aeggtatae	39
	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
<210>	22	
	33	
<212>	Artificial sequence	
-217/	Interpolat boquence	
<220>		
<223>	primer used to prepare modified form of BHV-1 gD gene	
<400>	22	22
ygaaga	tett tagggegtag egggggggggg egg	33

COVERTE COCCEL

```
<210> 23
<211> 34
<212> DNA
<213> Artificial sequence
<220>
<223> primer used in amplification of F gene of the Snook strain of BRS
<400> 23
aaattttctg cagatggcga caacagccat gagg
                                                                      34
<210> 24
<211> 35
<212> DNA
<213> Artificial sequence
<220>
<223> primer used in amplification of F gene of the Snook strain of BRS
<400> 24
ttaaggatcc tcatttacta aaggaaagat tgttg
                                                                      35
<210> 25
<211>
      39
<212> DNA
<213> Artificial sequence
<220>
<223> primer used in amplification of truncated form of F gene
<400> 25
                                                                      39
aattttggat cctcatgtgg tggattttcc tacatctac
<210> 26
<211> 38
<212> DNA
<213> Artificial sequence
<220>
<223> primer used in amplification of modified form of F gene
<400> 26
aaaattcacg tgaacataac agaagaattt tatcaatc .
                                                                      38
<210> 27
<211> 32
<212> DNA
<213> Artificial sequence
<220>
```



<223>	primer used to amplify G gene of the BRSV Snook strain	
<400>	27	
acgcgt	cgac atgtccaacc atacccatca tc	32
<210>	28	
<211>	38	
<212>	DNA	
<213>	Artificial sequence	
<220>	primer used to amplify G gene	
(223)	primer used to ampriry a gene	
<400>	28	
ttaaaa	tcta gattagatct gtgtagttga ttgatttg	38
.010.	20	
<210> <211>	29	
<211>		
	Artificial sequence	
<220>		
<223>	primer used to amplify truncated form of G gene	
-400-	29	
<400>	ggat ccgctaaagc caagcccaca tcc	33
cccaa	ggat tegeradage caageceaca tee	,,
<210>		
<211>		
<212>		
<213>	Artificial sequence	
<220>		`
	primer used to amplify truncated form of G gene	
<400>	30	
ttaaaa	tcta gattagatct gtgtagttga ttg	33
<210>	31	
<211>	36	
<212>	DNA	
<213>	Artificial sequence	
<220>	21. 2	
<223>	oligonucleotide used to amplify cDNA of EO gene	
<400>	31	
	gtog acatgaagaa actagagaaa goootg	36
<210>	32	
<211>	40 DNA	

DOVEDTAR LORDEDH

```
<213> Artificial sequence
<220>
      oligonucleotide used in amplification of cDNA of EO gene of the O
<223>
       sloss strai
<400> 32
                                                                     40
catacoggat cotcaggotg catatgoocc aaaccatgto
<210> 33
<211> 39
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide used in synthesis of EO gene
<400> 33
catgacgcgg ccgctatgaa gaaactagag aaagccctg
                                                                     39
<210> 34
<211> 40
<212> DNA
<213> Artificial sequence
<220>
<223>
      oligonucleotide used in synthesis of EO gene
<400> 34
catgacagat ctttaggctg catatgcccc aaaccatgtc
                                                                     40
<210> 35
<211>
      33
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide used in the amplification of the cDNA of E2 gene
<400> 35
catgacgtcg acatgacgac tactgcattc ctg
                                                                     33
<210> 36
<211>
      36
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide used in the amplification of the cDNA of E2 gene
<400> 36
```

ogymm++m.ogosox



catgac	agat ottcaacgto cogaggtoat ttgtto	36
<210>	37	
<211>	36	
<212>		
	Artificial sequence	
(213)	Altifold bequence	
<220>		
<223>	oligonucleotide used in the synthesis of the E2 gene	
<400>	37	
catgac	gcgg ccgctatgac gactactgca ttcctg	36
<210>	38	
<211>	35	
<212>		
<213>	Artificial sequence	
<220>		
<223>	oligonucleotide used in the synthesis of the E2 gene	
<400>	38	
catgac	agat ctcaagcgaa gtaatcccgg tggtg	35
<210>	39	
<211>	36	
<212>		
	Artificial sequence	
12137	The Little Bedge B	
<220>		
<223>	oligonucleotide used in the amplification of the cDNA of E2 ger	ne
<400>	39	
actqta	tcta gaatgaccac cacagettte ctaate	36
<210>	40	
<211>		
<212>		
	Artificial sequence	
(213/	Altilitat sequence	
<220>		
<223>	oligonucleotide used in the amplification of the cDNA of E2	
<400>	40	
actota	agat etttaagtat teaeteeage acceatage	39
<210>	41	
<211>	41	
<212>		
	Artificial sequence	
. 224		

<223>	oligonucleotide used in synthesis of E2 gene	
<400>	41	
	gegg eegeeetatg accaceacag ettteetaat e	41
<210>	42	
<211> <212>	36 DNA	
	Artificial sequence	
(215)	Altificial bequence	
<220>		
<223>	oligonucleotide used in synthesis of E2 gene	
<400>	42	2.0
catgac	agat ctttatatga actctgagaa gtagtc	36
<210>	43	
<211>	39	
<212>	DNA	
<213>	Artificial sequence	
<220> <223>	oligonucleotide used in amplification of the cDNA of the E0 g	ono
<223>	origonacteocide ased in amprilication of the common the so g	lerre
<400>	43	
catacc	gtcg acatgagaaa gaaattggag aaggcactg	39
<210>	44	
<210>	39	
<211>	DNA	
	Artificial sequence	
12137	Attitional boquenoe	
<220>		
<223>	oligonucleotide used in amplification of the cDNA of the E0 g	ene
<400>	44	39
Catacc	ggat cctcatgctg catgagcacc aaaccatgc	33
<210>	45	
<211>	42	
<212>		
<213>	Artificial sequence	
<220>		
<220>	oligonucleotide used in the synthesis of the EO gene	
-225/	orrangemental and are one of memoria or one no delle	
<400>	45	
catgac	gcgg ccgctatgag aaagaaattg gagaaggcac tg	42
<210>	46	
<210>	39	
<211>	DNA	
-414/	water 6	

	<213>	Artificial sequence	
	<220>		
	<223>	oligonucleotide used in the synthesis of the EO gene	
	\225 <i>></i>	origonaciociae aboa in one synchesis or one 10 gene	
	<400>	46	
		agat cttcatgctg catgagcacc aaaccatgc	39
	<210>	47	
	<211>	39	
	<212>	DNA	
	<213>	Artificial sequence	
	<220>		
	<223>	oligonucleotide used in amplification of cDNA of HN gene	
	<400>	47	
	catato	gtcg acatggaata ttggaaacac acaaacagc	39
	.010	48	
	<210>		
	<211> <212>		
Q		Artificial sequence	
4	(213)	Artificial sequence	
ø	<220>		
đ	<223>	oligonucleotide used in amplification of cDNA of HN gene	
	(222)	origonational about in amplification of the or in gono	
	<400>	48	
ń		gata tetagetgea gtttttegga acttetgt	38
5	_		
m	<210>	49	
Secretary districts	<211>	33	
Pring.	<212>	DNA	
	<213>	Artificial sequence	
H	<220>		
	<223>	oligonucleotide used in the synthesis of the HN gene	
	<400>	49	33
	catact	gegg eegetttaat teaagagaae aat	33
	<210>	50	
		35	
		DNA	
	<213>	Artificial sequence	
	-413/	WEITIGIAL BOUNCE	
	<220>		
	<223>	oligonucleotide used in the synthesis of the HN gene	
	<400>	50	
	catato	gata totagotgoa gtttttogga actto	35

```
<210> 51 '
    <211> 36
    <212> DNA
    <213> Artificial sequence
    <220>
    <223> oligonucleotide used in the amplification of cDNA of the F gene
    <400> 51
                                                                          36
    catatogtog acatgatoat cacaaacaca atcata
    <210> 52
    <211> 36
    <212> DNA
    <213> Artificial sequence
    <220>
    <223> oligonucleotide used in the amplification of cDNA of the F gene
    <400> 52
    catgaccaga tcttattgtc tatttgtcag tatata
                                                                          36
<210> 53
    <211> 42
    <212> DNA
    <213> Artificial sequence
    <220>
    <223> oligonucleotide used in the synthesis of the F gene
    <400> 53
    catactgcgg ccgctcaaat agacataaca aaactgcaac gt
                                                                          42
    <210> 54
    <211> 41
    <212> DNA
    <213> Artificial sequence
    <220>
    <223>
          oligonucleotide used in the synthesis of the F gene
    <400> 54
    catatogata totatgoact agattgatac caacttocaa c
                                                                         41
    <210> 55
    <211>
          36
    <212> DNA
    <213> Artificial sequence
    <220>
    <223> primer used in the amplification of the gB gene
```



```
<400> 55
                                                                      36
ttttaagata tcatgcccgc tggtggcggt ctttgg
<210> 56
<211> 39
<212> DNA
<213> Artificial sequence
<220>
<223> primer used in the amplification of the gB gene
<400> 56
                                                                      39
ttttaaggat ccctacaggg cgtcggggtc ctcgctctc
<210> 57
<211> 39
<212> DNA
<213> Artificial sequence
<220>
<223> primer used in the amplification of the truncated form of the gB
      gene
<400> 57
ttttaaggat ccctagtggt ccaccttgac cacgcggtc
                                                                      39
<210> 58
<211> 39
<212> DNA
<213> Artificial sequence
<220>
<223> primer used in the amplification of the modified form of the gB \rm g
       ene
                                                                      39
aaaatttcga tatccacctc ggcctcgccg acgcccggg
<210> 59
<211> 36
<212> DNA
<213> Artificial sequence
<220>
<223> primer used in the amplification of the gC gene
<400> 59
ttttaagata tcatggcctc gctcgcgcgt gcgatg
                                                                      36
<210> 60
<211>
      37
<212> DNA
```



(213)	Altilitial Bequence	
-220-		
<220>	primar used in the amplification of the sC sone	
<223>	primer used in the amplification of the gC gene	
<400>		
ttttaa	agat ctttaaggcc ccgcctggcg gtagtag	37
<210>	61	
	36	
<212>		
	Artificial sequence	
(213/	Arctitetat begaenee	
.220.		
<220>	the state of the s	~
<223>	primer used in the amplification of the truncated form of the	JC
	gene	
<400>	61	
ttttaa	agat ctttaggggg aggcgtcgta gcgctg	36
<210>	62	
<211>		
<212>		
<213>	Artificial sequence	
<220>		_
<223>	primer used in the amplification of the modified form of the go	. G
	ene	
<400>	62	
aaaatt	tega tatecaegge geteggeaeg aegeeeaae	39
<210>	63	
<211>	·	
<212>		
	Artificial sequence	
(213)	Artificial sequence	
222		
<220>		
<223>	primer used in the amplification of the gD gene	
<400>	63	
aatttt	gata tcatgctgct cgcagcgcta ttggcg	36
<210>	64	
<211>	36	
<212>		
	Artificial sequence	
-2100	ozzzozaz boduonoo	
-220-		
<220>	number and in the smallfilestics of the or one	
<223>	primer used in the amplification of the gD gene	
<400>		
aatttt	ggat ccctacggac cgggctgcgc ttttag	36

COYMEL+E.COCCI

```
<210> 65
<211>
      40
<212> DNA
<213> Artificial sequence
<220>
<223> primer used in amplification of the truncated form the gD gene
aaattttgga tccctagcgg tggcgcgaga cgcccggcgc
                                                                      40
<210> 66
<211> 39
<212> DNA
<213> Artificial sequence
<220>
<223> primer used in the amplification of the modified gD gene
<400> 66
                                                                      39
aaaatttega tatecaeett ceeeeegeee gegtaeeeg
<210> 67
<211> 30
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide used in the amplification of the cDNA of the ORF3
       gene
<400> 67
                                                                      30
cactacgata tcatggctca tcagtgtgca
<210> 68
<211> 30
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide used in the amplification of the cDNA of the ORF3
       gene
<400> 68
                                                                      30
cactacagat ctttatcgtg atgtactggg
<210> 69
<211> 30
<212> DNA
<213> Artificial sequence
```

•

J



	<220>	oligonucleotide used in the amplification of the cDNA of the	שפט
	<223>	gene	JRFJ
	<400>	69	
	ctcacc	gtcg acatgagatg ttctcacaaa	30
	<210>	70	
	<211>	30	
	<212>		
	<213>	Artificial sequence	
	<220>		
	<223>	oligonucleotide used in the amplification of the cDNA of the G	ORF5
	<400>	70	
	ctcacc	tota gactaggeet eccattgete	30
	•		
	<210>	71	
	<211>	30	
, Fin		DNA	
*.j	<213>	Artificial sequence	
ញ់	<220>		
	<223>	oligonucleotide used in synthesis of ORF5 gene	
<u></u>	<400>	71	
N	cacctc	ggat cctttgccga tggcaacggc	30
2			
	<210>	72	
m	<211>		
		DNA	
		Artificial sequence	
السط السط	<220>		
•	<223>	oligonucleotide used in synthesis of ORF5 gene	
	<400>	72	
		ggat ccttagactt cggctttgcc caa	33
	<210>	73	
		30	
		DNA	
		Artificial sequence	
	<220>		
		oligonuclectide used in amplification of the CDNA of the OPPS	denc
	<223>	oligonucleotide used in amplification of the CDNA of the ORF6	Aeue
	<400>	73	
	cactca	gtcg acatgggagg cctagacgat	30



<223>	oligonucleotide used in the amplification of the cDNA of the cgene	RF3
<400> cactac	78 ctcta gactatcgcc gtacggcact	-30
<210> <211>		
<212>		
<213>	Artificial sequence	
<220>		
<223>	oligonucleotide used in the amplification of the cDNA of the Ggene	RF5
<400>	79	
cactac	cgata tcatgttgga gaaatgcttg	30
<210>	80	
<211>		
<212> <213>		
10107		
<220>		
<223>	oligonucleotide used in the amplification of the cDNA of the C gene)KF5
<400>	80	
cactac	cagat ctctaaggac gaccccattg	30
<210>	81	
<211>		
<212> <213>		
12137	Artificial beganne	
<220>	all and a second to the continuity of the ODDE	
<223>	oligonucleotide used in the synthesis of the ORF5 gene	
<400>	81	
cactac	eggat cegecageaa egacageage tee	33
<210>	82	
<211>	33	
<212> <213>		
	· · · · · · · · · · · · · · · · · · ·	
<220>	eligenuslectide used in the symthesis of the OPEE core	
<223>	oligonucleotide used in the synthesis of the ORF5 gene	
<400>	82	
cactac	eggat cettagacet caactitgee eet	33

COVEET-INCOVED

```
<210> 83 '
 <211>
        33
 <212> DNA
 <213> Artificial sequence
 <220>
       oligonucleotide used in the amplifiction of the cDNA of the ORF6
 <223>
 <400> 83
                                                                        33
 cacatcctgc agatggggtc gtccttagat gac
· <210> 84
 <211>
       30
 <212> DNA
 <213> Artificial sequence
 <220>
       oligonucleotide used in the amplifiction of the cDNA of the ORF6
 <223>
        gene
 <400> 84
                                                                        30
 cacatctcta gattatttgg catatttgac
 <210> 85
 <211>
        30
 <212>
        DNA
 <213> Artificial sequence
 <220>
       oligonucleotide used in the synthesis of the ORF6 gene
 <223>
                                                                        30
 cactacggat ccgtgagtcg cggccgactg
 <210> 86
 <211>
        33
 <212>
        DNA
 <213>
       Artificial sequence
 <220>
 <223>
        oligonucleotide used in the synthesis of the ORF6 gene
 <400> 86
                                                                        33
 cactacggat ccttaaacag cttttctgcc acc
 <210>
        87
 <211>
        30
 <212>
        DNA
 <213> Artificial sequence
 <220>
 <223> oligonucleotide used in the amplification of the cDNA of the HA {\tt g}
```





ene

<400> ctccate	87 gata tcatggaagc aaaactattc 30
<210><211><212><213>	88 30 DNA Artificial sequence
<220> <223>	oligonucleotide used in the amplification of the cDNA of the HA g
<400> ctccate	88 caga tcttaaatgc atattctgca 30
<210><211><212><212><213>	89 30 DNA Artificial sequence
<220> <223>	oligonucleotide used in the synthesis of the modified HA gene
<400> tccgcg	89 gccg cacatgctaa caattccaca 30
<210><211><211><212><213>	
<220> <223>	oligonucleotide used in the synthesis of the modified HA gene
<400> tccgcg	90 gccg cttacattga ttctagtttc ac 32
<210><211><211><212><213>	91 30 DNA Artificial sequence
<220> <223>	oligonucleotide used in the amplification of the cDNA of the NA gene of the H1N1 strai
<400> cacctg	91 gtcg acatgaatcc aaatcagaag 30

<211> <212> <213>	30 · DNA Artificial sequence
<220>	
<223>	oligonucleotide used in the amplification of the cDNA of the NA gene
<400>	92
cacctg	tcta gactacttgt caatggtgaa 30
<210>	93
	31
<212> <213>	
<220>	
<223>	oligonucleotide used in the synthesis fo the modified form of the NA gene
<400>	93
cactac	gaat tcacaaattg ggaatcaaaa t 31
<210>	04
<210>	
<212>	
	Artificial sequence
<220>	
<223>	oligonucleotide used in the synthesis fo the modified form of the ${\tt NA}\xspace$ gene
<400>	94
	tgaa ttcgcggccg cggatccggt 30
010	0.5
<210> <211>	95
<211>	
	Artificial sequence
<220>	
<223>	oligonucleotide used in the amplification of the HA gene
<400>	95
ctgcac	gtcg acatgaagac tgtcattgcc 30
-21A-	0.5
<210> <211>	96 24
	DNA
<213>	Artificial sequence
<220>	
<223>	oligonucleotide used in the amplification of the HA gene of the $\ensuremath{\mathrm{H}}$



3N2 strai

Dayeette Daneol

<400> 96 gatatctcag atgcaaatgt tgca 24	
<210> 97 <211> 33 <212> DNA <213> Artificial sequence	
<220> <223> oligonucleotide used in the synthesis of the modified form of the HA gene	
<400> 97 caccgcggat cccttccaga aaatggcagc aca 33	
<210> 98 <211> 33 <212> DNA <213> Artificial sequence	
<pre><220> <223> oligonucleotide used in the synthesis of the modified form of the HA gene</pre>	
<400> 98 caccgcggat ccttagtctt tgtatcccga ctt 33	
<210> 99 <211> 30 <212> DNA <213> Artificial sequence	
<220> <223> oligonucleotide used in the amplification of the cDNA of the NA g ene	
<400> 99 cactcagata tcatgaatcc aaagcaaaag 30	
<210> 100 <211> 30 <212> DNA <213> Artificial sequence	
<220> <223> oligonucleotide used in the amplification of the cDNA of the NA g ene	
<400> 100 cactcatcta gattatatag gcatgagatc 30	



```
<210> 101
<211> 33
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide used in the synthesis of the modified form NA gene
<400> 101
cactacggat ccttcaagca atatgagtgc gac
                                                                      33
<210> 102
<211> 33
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide used in the synthesis of the modified form NA gene
<400> 102
cactacggat ccttatgaag tccaccatac tct
                                                                      33
<210> 103
<211> 36
<212> DNA
<213> Artificial sequence
<220>
<223> oligonucleotide used in the amplification of the cDNA of the bovi
      ne GM-CSF gene
<400> 103
catatogtog acatgtggct gcagaacctg cttctc
                                                                      36
<210> 104
<211> 34
<212> DNA
<213> Artificial sequence
<223> oligonucleotide used in the amplification of the cDNA of the bovi
      ne GM-CSF gene
<400> 104
                                                                      34
catgaccaga tcttcacttc tgggctggtt ccca
<210> 105
<211> 36
<212> DNA
<213> Artificial sequence
```

·**

SS442.OSCI





<220>	·	
<223>	oligonucleotide used in the amplification of the cDNA of the poine GM-CSF gene	rç
<400> catato		36
<210>	106	
<211>	37	
<212>	DNA	
<213>	Artificial sequence	
222		
<220>		
<223>	oligonucleotide used in the amplification of the cDNA of the po	rc
	ine GM-CSF gene	
<400>	106	
catgaco	caga tottoaette tgggetggtt eccagea	37